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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,933	03/11/2004	John Wissinger	4623N-000017	6934
27572 7590 03/15/2007 HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			EXAMINER AYRES, TIMOTHY MICHAEL	
			ART UNIT	PAPER NUMBER
			3637	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		03/15/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No. 10/798,933	Applicant(s) WISSINGER ET AL.	
	Examiner Timothy M. Ayres	Art Unit 3637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 14-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 14-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/20/07 has been entered.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 8 recites the limitation "the first pivot axis" in line 2. There is insufficient antecedent basis for this limitation in the claim.

5. Claims 15-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear whether the applicant is claiming a latching arrangement or a latching arrangement in combination with a door of a

refrigerator. If the applicant intended to claim only the latching arrangement, all positive recitation to the door or refrigerator must be removed. If the applicant intends to claim the combination, then the preamble and claim body must be amended to reflect this.

***Claim Rejections - 35 USC § 102***

6. Claims 1-6, 12, 15, and 21-25 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 2,948,560 to Rop. Rop teaches a refrigerator that comprises a housing with a door pivotally coupled to the housing and particularly focusing on the embodiment seen in figures 4-7. A striker (11a, 12a, 13a) is connected to the housing. A latching arrangement is carried by the door and includes a handle (20a) connected to the door for movement between a first position and a second position. The handle has a first free end attached to the first pivot as seen in figure 7 and a second free end located proximate the cam follower (19a). The handle (20a) defines an cam surface (24a) that is a pin. A pawl (18a, 16a, 17a) is connected to the door for movement between a latched position that is engaged with the striker for securing the door in a closed position and an unlatched position allowing the door to be pivoted from the closed position. The pawl including a cam follower (19a) that is a curved slot and is driven in arcuate path around a second pivot axis (15a) by the cam surface (24a) and thereby rotates the pawl from the latched position (Fig 4) to the unlatched position (Fig 5). The pawl is pivotally connected to the door for rotation about a second pivot axis (15a). A biasing element (22a) biases the handle via the slot and pin arrangement of the pawl. The latching

arrangement is located at an edge of the door and the handle is generally parallel to the face of the door. The cam surface (24a) is the surface of a pin and therefore is curved. A line can be drawn between the first and second pivot axis making them located along said line and the line would be substantially parallel to a front face of the door. As seen in figure 7, the pawl and a portion of the handle are disposed in a housing on the door and is considered a portion of the door and therefore a recess of the door. Therefore the latching arrangement is considered disposed in the recess of the door. Also it is substantially hidden from view since most of the latching arrangement is in the recess and is considered almost completely hidden from view since the perimeter of the door and the back surface of the door conceals the handle when the door is open and viewed from the side or back of the door.

7. Claim 15 is rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 5,915,805 to Lee. Lee teaches a latching arrangement for a refrigerator. A handle (50) has a cam surface that drives a cam follower (63) of a pawl (60) thereby causing the pawl to rotate and unlatch the door. The door is considered latched by the magnets (32) as seen in figure 6 and unlatched as seen in figure 7. The striker is not positively recited and can be considered element (70) or the surface of the housing to fulfill the functional requirements. The latching arrangement is located in a recess of the door as best seen in figure 6 and as best understood in the claim 15 in light of the 112.2 rejection above.

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8. Claims 1-4, 7, 12, 15-17, and 21-23 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 2,445,709 to Curtiss. Curtiss teaches a latching arrangement for a refrigerator. A handle (36) rotates around a first pivot axis (37) and has a curved cam surface (41) that drives a cam follower (33,40) along an arcuate patch around a pivot axis (32). A pawl (45) engages with a striker (22) to latch the door. The pawl (45) rotates around a second pivot axis (49) due to the force of the cam follower (33) as transferred through pin (42). The second pivot axis (49) is fixed to the door. A leaf spring (38) is carried by the handle and biases the handle to the first position. "Carried by" is interpreted to mean either disposed within or in contact with. The handle (36) is generally parallel with the front face of the door and seen in figure 2. The latching arrangement is substantially disposed within a recess of the and substantially hidden from view. The first and second pivot axis are disposed rearward from a front face of the refrigerator. As seen in figure 2, the pawl and a portion of the handle are disposed in a recess of the door. Therefore the latching arrangement is considered disposed in the recess of the door. Also it is substantially hidden from view since most of the latching arrangement is in the recess and is considered almost completely hidden from view since the perimeter of the door and the back surface of the door conceals the handle when the door is open and viewed from the side or back of the door.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claim 7, 8, 16, and 17 rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 2,948,560 to Rop in view of US Patent 5,906,423 to Lyu. Rop discloses every element as claimed except a leaf spring carried by the handle for biasing the handle. Lyu teaches a handle for a refrigerator that includes a first pivot axis at a first free end (24) and proximate to the second end is a leaf spring (61) in contact with a ledge (20b) of the handle (20) to force the handle to a first position. The handle (20) is configured as a pull handle in that the handle is moved away from the door to help the door open. At the time of the invention it would have been obvious for a person of ordinary skill in the art to make the handle as Rop a pull handle as taught in the embodiment in figure 8 and 9, but use the same slot and pin structure of the embodiment of figures 4-7. This is done by mirroring the slots around the pin so that when the pin is moved with the handle, the slots are driven and thereby cause the pawls to rotate and the motivation for this is that it will be easier to unlatch the door since it is

the same motion as needed to continue to open the door. Note: It has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art. See MPEP § 2144.04.

12. At the time of the invention it would have been obvious to modify the modified latching arrangement of Rop by adding in a leaf spring and ledge as taught by Lyu to help return the handle to the latched position.

13. Claims 9, 10, 18, 19 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 2,948,560 to Rop. Rop discloses every element as claimed except that the handle having a slot curved along its length to define the cam surface and the second pivot axis as being vertical. It would have been obvious for a person of ordinary skill in the art to modify the latching arrangement of Rop by having the making the cam surface the curved slot (19a) on the handle and the cam follower the pin (15a) on the pawls, since applicant has not disclosed that having the slots and the cam follower in these locations solves any stated problem or is for any particular purpose and it appears that the latching arrangement would perform equally well with the curved cam surface of the slots being on the pawl and the cam follower being the curved pin on the handle since it is functionally equivalent and works equally well. Note: It has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art. See MPEP § 2144.04.

14. Regarding claim 26, Rop does not expressly disclose the second pivot axis as being vertical. The embodiment as seen in figures 1-3 of Rop have the second pivot



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axis vertical. It would have been obvious for a person of ordinary skill in the art to modify Rob by having rotating the sticker and pawl so they function as seen in figures 1-3, since applicant has not disclosed that having the second pivot axis vertical solves any stated problem or is for any particular purpose and it appears that the latching arrangement would perform equally well with the second pivot axis horizontal since it is functionally equivalent and works equally well.

15. The axes are considered to be rearward of a front face of the door since as in figure 7 and further compared with figure 10 the front face of the door has an arcuate shape such that the center of the door bows out from the end making the axis toward the rearward of the center bowed section on the front face of the door.

16. Claims 11 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 2,948,560 to Rop as applied to claims 9, 10, 18, and 19 above, and further in view of US Patent 2,172,467 to Geddes. Rop discloses every element as claimed and discussed above except the curved slot being defined by a pair of fingers. Geddes teaches a refrigerator latch with a lever arm (18) with a slot (19) defined by a pair fingers on both sides of the slot (19) that have a cam surface that engage a cam follower (20). At the time of the invention it would have been obvious for a person of ordinary skill to modify the handle of Rop by having the slots being open at one end as taught by Geddes, which will make the latching arrangement easier to assemble and once assembled is functionally equivalent and works equally well.

### ***Response to Arguments***

17. Applicant's arguments filed 2/20/07 have been fully considered but they are not persuasive. The latching arrangement are considered to be disposed in a recess since all the elements have a portion or are entirely disposed in a recess, furthermore some of the claims recite that the latching arrangement is substantially disposed in the recess, the examiner considers the term substantially to mean that at least 51 percent of the latching arrangement is disposed in the recess, though this can be interpreted as 51 percent of the volume, area, or even the number of parts of the latching arrangement. With the latching mechanism (pawl, spring...etc) being located in a recess this reduces the requirement that the handle is in the recess at all. In a generally sense the references teach a portion of each element disposed in the recess. In regards to the substantially hidden from view, the angle of viewing is not defined therefore all of the prior art has the latching arrangement hidden from view when viewed from the proper angle. Also, with the issue of the term substantially is brought in again, it is unclear as to what constitutes substantially hidden from view.

### ***Conclusion***

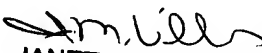
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy M. Ayres whose telephone number is (571) 272-8299. The examiner can normally be reached on MON-THU 8:00 - 5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on (571) 272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TMA  
3/08/07



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